# AGENDA

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|---|---|---|---|
| SUBJECT: | **Bio/Habitat WQX Pilot Call** | DATE: | 19 July 2007 |
| HOST: | Dwane Young | Start: | 1:00PM |
| LOCATION: | WEBINAR<br>Call in number: 866-299-3188<br>Webinar ID 191-470-945 | End: | 2:00PM |

| Time | Item | |
|---|---|---|
| **1pm** | **Introductions and Roll Call to Bio/Habitat WQX Pilot Call** | Dwane Young |
| **1:12 pm** | **Issue Log** | Dwane Young |
| **1:55 pm** | **Questions/Comments** | Dwane Young |
| **2pm** | **Next meeting: To Be Announced** | |

**Attendees**:
See Appendix A

**WQX Issue Log**:
See Appendix B

# Meeting Minutes

**The discussion primary focus was the WQX v2.0 Draft Bio Schema Issue Log – 07/17/2007**

**Metrics, Results, and Index**

Metric is dimensionless – no unit.

Result has unit.

A few suggestions are:

- **List everything as a result:** no distinction between metric and results. When value is calculated, use value type as calculated. Or create a flag field where user can denote whether the result is an index or metric.

- Have database calculate metrics and indices.

Indices and metrics are different enough type of data that it made the results confusing. The idea was to keep results separate as raw data. Indices and metrics are calculated information. As a group, every index and metric has a value, scale, and no unit. Also indices and metrics are hard to define at a national level.

Additional data elements may need to be added to the index / metric groups to capture metric value and score.

**Action item:** The WQX team will go through existing characteristic list and break out what they consider to be index, metric, and result. Dwane will write up the advantages and disadvantages of the options. These items will be sent out to the participants prior to the next pilot call.

**Total Sample Weight**

Recommended resolution: Remove the data element and make it a characteristic

**ActivityIndex and ActivityMetric Citation; TaxonomicDetails Citation; Citation in appropriate areas**

Recommended solution: Add Citation sweep of data elements to the schema.

**ActivityIndex and ActivityMetric structure**

The way that index and metric are currently described in the schema may not be correct. Need to be associated with a monitoring location and treated like any other activity.

Option:

Add new activity group concept called Index that will allow activities to be grouped with their indices, with new activity type called ActivityIndex and another data elements to capture unused index information.

**Index and metric scale**

The current structure allows for a description of the scale. The team will be changing this to accommodate minimum and maximum value. Citation will be used to provide more information concerning this scale..

Resolution: Data elements will be added to capture minimum and maximum scale values.

**Reporting site condition**

This issue's status was left unresolved as time ran out. Dwane will take this issue before the Monitoring Board.

Attendees were asked to review the list in Appendix B and if they had any suggestions or comments to communicate with Dwane via email (Young.Dwane@epa.gov). .

Next call will be scheduled in a couple of weeks. An invitation will be sent via e-mail.

Appendix A – Attendees

| Name | Org/Program Role | Email | Present |
|---|---|---|---|
| Andrews, Paul | RTI | andrewsp@rti.org | Yes |
| Arquines, Rome | HQ | Arquines.Rombel@epa.gov | Yes |
| Booth, Nate | USGS | nlbooth@usgs.gov | |
| Brossett, Michele | Georgia | michele_brossett@dnr.state.ga.us | |
| Bryant, Ernestine | LMCO | Ernestine.Bryant@LMCO.com | Yes |
| Byrd, Kathy | Florida | | Yes |
| Chen , Harry | New Jersey | harry.chen@dep.state.nj.us | |
| Cude, Curtis | Oregon | CUDE.Curtis@deq.state.or.us | |
| Dallaire, Thomas | Massachusetts | thomas.dallaire@state.ma.us | |
| Faulkner, Chris | HQ | | |
| Feldman, Dave | Montana | | |
| Frohm, Terry | Florida | | |
| Gunthardt, Kristen | EPA/OW | Gunthardt.Kristen@epamail.epa.gov | Yes |
| Harcum , Jon | Tetratech | jon.harcum@tetratech-ffx.com | |
| Harrison, Jim | Region 4 | Harrison.Jim@epamail.epa.gov | |
| Hellyer , Greg | Region 4 | hellyer.greg@epa.gov | |
| Hill, Randy E | HQ | Hill.RandyE@epa.gov | Yes |
| Howe, Elanor | Massachusetts | elanor.howe@state.ma.us | |
| Hudson, James | Wisconsin | James.Hudson@Wisconsin.gov | Yes |
| Jessup, Ben | Tetratech | | |
| Jorgensen, Ryan | Gold Systems | ryanj@goldsystems.com | Yes |
| Kim, Won | Oregon | kim.won@deq.state.or.us | |
| Knowles, Kathy | Delaware | kathy.knowles@state.de.us | |
| Koska, Paul | Region 6 | Koska.Paul@epamail.epa.gov | Yes |
| Leppo, Erik | Tetratech | erik.leppo@tetratech.com | |

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|---|---|---|---|
| Mann, Joshua | | jmann077@yahoo.com | |
| McElhinney, Cary | Region 5 | McElhinney.Cary@epamail.epa.gov | |
| McQuillan, Jolene | Montana | jmcquillan@mt.gov | Yes |
| Merrill, Larry | Region 3 | merrill.larry@epa.gov | |
| Morton, Paul | New Jersey | morton@dep.state.nj.us | Yes |
| Quant, Vilma | Florida | vilma.quant@dep.state.fl.us | Yes |
| Ousley, Jennifer | Region 7 | ousley.jennifer@epa.gov | |
| Ragland, Nancy | Texas | NRagland@tceq.state.tx.us | |
| Schenning, Lisa | Florida | | |
| Scozzafava, Mike | HQ | Scozzafava.michaele@epa.gov | |
| Serenbetz, Gregg | HQ | Serenbetz.gregg@epa.gov | Yes |
| Shoutis, Art | Wind River, Wyoming | | |
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| Soule, Deb | New Hampshire | dsoule@des.state.nh.us | Yes |
| Stewart, Roger | Virginia | restewart@deq.virginia.gov | |
| Tarquinio, Ellen | HQ | Tarquinio.ellen@epa.gov | |
| Timms, Doug | EnfoTech | douglas_timms@enfotech.com | |
| Townsend, Jeff | Florida | | |
| Truesdale , Robert | RTI | rst@rti.org | |
| White, Jeffrey | Tetratech | jeffrey.white@tetratech.com | Yes |
| Wilcox, Dave | Gold Systems | DaveW@goldsystems.com | |
| Witcher, Angela | New Jersey | angela.witcher@dep.state.nj.us | Yes |
| Young, Dwane | HQ | Young.Dwane@epamail.epa.gov | Yes |

Appendix B – Issue Log

**WQX v2.0 Draft Bio Schema Issue Log – 07/17/2007**

| Issue No. | Issue Name | Description | Examples | Options | Action 07/19/2007 |
|---|---|---|---|---|---|
| 1 | **Accuracy and reporting of Terms (Metrics vs Results)** | Given similarities between the types of data that we report as Metrics as opposed to Results, is it possible that same items are being reported in a different manner (leading to less consistent data). | In evaluating an IBI Score, we might have metrics like the<br><br>following (among others):<br><br>1. Number of Native Species<br><br>2. Percent Anomalies<br><br>3. etc.<br><br>Likewise, the following might be reported as Results rather than<br><br>Metrics:<br><br>1. Number of Brook Trout (reported as Multi-Taxon Population<br><br>Census)<br><br>2. Number of Anomalies (reported as Single Taxon Frequency<br><br>Class).<br><br>These concepts seem very similar. | Tweaking Metrics or Frequency<br><br>Class Information would allow us<br><br>to model the same things in two<br><br>different places. After the Pilot,<br><br>and with feedback, determine if it<br><br>is appropriate to merge certain<br><br>concepts. | Go through existing list of characteristics and identify Metrics and characteristics |
| 2 | **Index vs. Metric vs. Result** | Should Indices and Metrics be separate at all or should they just be characteristics that results get reported under? | | | |
| 3 | **Total Sample Weight** | Should total weight of a sample just be captured as a characteristic versus a separate sample description? | | | |
| 4 | **ActivityIndex and ActivityMetric Citation** | Should we add a citation data element for ActivityIndex and ActivityMetric data blocks? | | | |

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|---|---|---|---|---|---|
| 5 | **TaxonomicDetails**<br><br>**Citation** | Should an optional citation data element be available for the TaxonomicDetails data group: FunctionalFeedingGroupName, TaxonomicPollutionTolerance, and TrophicLevelName?<br><br>Different sources may cite different values for the same organism. | | | |
| 6 | **Citation for other areas of schema** | Citations at all areas of the schema that seem appropriate?<br><br>■ reference location indicator<br>■ all methods (sample prep, collection, analytical) | | | |
| 7 | **ActivityIndex and ActivityMetric structure** | Are ActivityIndex and ActivityMetric modeled properly so that Indices may pertain to a given site, monitoring location, or geographic area (i.e. transcend multiple activities or activity locations)? | | Have an Activity Type of "Index" that would restrict Activity data to just ActivityIndex and Activity Metric data blocks so that you could ensure that the Index is associated with a given Monitoring Location. Possibility of also having an Activity Group Type of Index to allow other activities to be associated with the Index. | |
| 8 | **Index and Metric scale** | How do the Index or Metric Scale data elements indicate whether a value is "good" or "bad" (e.g. when high scores are bad)? What about "1-3-5" scales? | | Already planning on making the Scale data elements have lower and upper bounds, so that both end values are ensured to be provided. Not sure where description of the scale would be provided. Would having a citation be enough? | |
| 9 | **Index and Metric comment** | Should we add comment data fields to Index and Metric data blocks? | | | |
| 10 | **Metrics with no Indexes** | How Index and Metric are modeled currently, Metrics can't exist without an Index as a parent. What happens to Metrics that don't end up getting rolled up into Indices? | | May have an Index name or type of "dummy index" that provides a place for metrics that aren't associated with an index. | |

| Issue No. | Issue Name | Description | Examples | Options | Action 07/19/2007 |
|---|---|---|---|---|---|
| 11 | **Statistical approach to indexes** | How do you capture the statistical approach to many indices? | O/E; RIVPACS | | |
| 12 | **Metric calculation from replicates** | Could the current model handle a scenario where a metric is calculated based on the average of two metrics drawn from 2 replicate samples? | | | |
| 13 | **Sites that don't allow for Index calculation** | What about sites that don't yield enough individuals for index calculation? Should be able to indicate this (that the index wasn't calculated). Should a qualifier to indicate this be added to the Activity Index? | "Z" qualifier may indicate that index was not calculated because there weren't enough bugs | | |
| 14 | **Reporting site condition** | Will the schema allow for reporting condition (good/fair/poor) as determined within a probabilitistic monitoring design? | | | |
| 15 | **Other biological methods** | Separating out just electrofishing and net tow methods for biological monitoring seems narrow in that there are many other methods for biological monitoring that states use | WI Lake fish surveys use passive nets, no data elements for net type, size, duration | | |
| 16 | **Other net tow elements** | Net Tow data elements<br>■ need to be able to capture net area and net mesh size | | | |
| 17 | **Unidentified Species Indicator field length** | Should we make the UnidentifiedSpeciesIdentifier a longer field to be able to handle full taxa names (ie a taxa is reported that is not in ITIS) | | | |
| 18 | **Reference site date range** | Should there be a date range for reference site within the monitoring location weighting block? | A given site is a reference site for a specific amount of time | | |
| 19 | **Control sites** | What about monitoring locations that are "control sites" – not reference sites, but sites that are used for comparison | Monitoring is down before and after a change in a point source's permit – the monitoring done before | | |

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|---|---|---|---|---|---|
| | | | the change may have series of "control sites" | | |
| 20 | **Groundwater** | Ground water data elements??? | | | |
| 21 | **Dilution data element** | Do we need to add a dilution data element for sample preparation data elements? | | | |
| 22 | **Geo method accuracy data elements** | Need to add Geopositioning Method accuracy data elements (MAD Codes) | | | |
| 23 | **"as N" issue** | Need to add Chemical speciation data element (e.g. "as N" issue) | | | |
| 24 | **Personnel and lab cert fields** | Should we add personnel, and Lab Certification fields? | | | |
| 25 | **Other business rules** | What other business rules should we include? The schema as is very open and flexible. | | | |